WHAT IS CLAIMED IS:

1   1.   A method for controlling and providing access to a file to at least one

2 remote computer over a network, comprising:

3   maintaining metadata about files maintained at remote storage

4 locations;

5   receiving a request from the remote computer for a filename of a

6 requested file over the network;

7   determining from the metadata one remote storage location address

8 associated with the filename where the requested file is located;

9   updating the metadata for the requested file; and

10   sending the storage location address to the remote computer.

1   2.   The method of claim 1, wherein the remote computer is a source code

2 management system client.

1   3.   The method of claim 1, wherein the storage location address identifies

2 a storage device that is at a geographical location closer to the remote computer than

3 a location of the metadata.

1   4.   The method of claim 3, wherein the request is for checking-out the

2 requested file corresponding to the filename, and further comprising:

3   locking the requested file;

4   returning a response code to the remote computer indicating that file check-out

5 is successful; and

6   updating the metadata indicating that the requested file is checked-out and

7 locked.

1   5.   The method of claim 3, wherein the request is for checking-in the

2 requested file corresponding to the filename, and further comprising:

3   updating the metadata indicating the requested file is unlocked; and

4   returning a response code indicating that the file check-in is successful.

1   6.   The method of claim 1, further comprising:

2   processing a pattern of requests for the file received from remote computers at

3   different geographical locations;

4   determining one of a plurality of remote storage locations based on the pattern

5   of requests for the file;

6   storing the file corresponding to the file at the determined remote storage

7   location; and

8   saving a correspondence between the file and the storage location address in

9   the metadata.

1   7.   The method of claim 6, wherein the determined remote storage

2   location is at a geographical location that is more proximate to the remote computer

3   having more requests for the file than other remote computers.

1   8.   The method of claim 6, wherein the determined remote storage

2   location is selected from the plurality of remote storage locations to minimize a

3   distance the requested file is transmitted between each remote computer and the

4   remote storage location based on the number of requests for the file from each remote

5   computer.

1   9.   The method of claim 1, wherein the remote computer is a source code

2   management system client, and the request is one of check-in, check-out, extract,

3   lock, unlock, delete.

1   10.   A method for accessing a file in a source code management system,

2   comprising:

3   sending a first request for a file;

4   receiving a storage location address containing the file in response to the first

5 request;

6   sending a second request to the storage location address; and

7   receiving an access to the file from the storage location address.

1   11.   The method of claim 10, wherein the first request is for checking-out

2 the file, and further comprising:

3   downloading the file from the storage location address.

1   12.   The method of claim 10, wherein the first request is for checking-in

2 the file, and further comprising:

3   sending a new version of the file to the storage location address.

1   13.   The method of claim 10, further comprising:

2   receiving a first response code from a remote computer in response to the first

3 request; and

4   receiving a second response code from the storage location in response to the

5 second request.

1   14.   A system for controlling and providing access to a file to remote

2 computers over a network, wherein remote storage locations are accessible over the

3 network, comprising:

4   metadata including information about files at the remote storage locations;

5   means for receiving a request from one remote computer for a filename of a

6 requested file over the network;

7   means for determining from the metadata one storage location address of one

8 remote storage location associated with the filename where the requested file is

9 located;

10   means for updating the metadata for the requested file; and

11   means for sending the remote storage location address to the remote

12 computer.

1   15.   The system of claim 14, wherein the remote computer is a source code

2 management system client.

1   16.   The system of claim 14, wherein the storage location address identifies

2 a storage device that is at a geographical location closer to the remote computer than

3 a location of the metadata.

1   17.   The system of claim 16, wherein the request is for checking-out the

2 requested file corresponding to the filename, and further comprising:

3   means for locking the requested file;

4   means for returning a response code to the remote computer indicating that file

5 check-out is successful; and

6   means for updating the metadata indicating that the requested file is checked-out

7 and locked.

1   18.   The system of claim 16, wherein the request is for checking-in the

2 requested file corresponding to the filename, and further comprising:

3   means for updating the metadata indicating the requested file is unlocked; and

4   means for returning a response code indicating that the file check-in is

5 successful.

1   19.   The system of claim 14, further comprising:

2   means for processing a pattern of requests for the file received from remote

3 computers at different geographical locations;

4   means for determining one of a plurality of remote storage locations based on

5 the pattern of requests for the file;

6   means for storing the file corresponding to the file at the determined remote

7 storage location; and

8   means for saving a correspondence between the file and the storage location

9 address in the metadata.

1   20.   The system of claim 19, wherein the determined remote storage

2 location is at a geographical location that is more proximate to the remote computer

3 having more requests for the file than other remote computers.

1   21.   The system of claim 19, wherein the determined remote storage

2 location is selected from the plurality of remote storage locations to minimize a

3 distance the requested file is transmitted between each remote computer and the

4 remote storage location based on the number of requests for the file from each remote

5 computer.

1   22.   The system of claim 14, wherein the remote computer is a source

2 code management system client, and the request is one of check-in, check-out,

3 extract, lock, unlock, delete.

1   23.   A system for accessing a file in a source code management system,

2 comprising:

3   means for sending a first request for a file;

4   means for receiving a storage location address containing the file in response

5 to the first request;

6   means for sending a second request to the storage location address; and

7   means for receiving an access to the file from the storage location address.

1   24.   The system of claim 23, wherein the first request is for checking-out

2 the file, and further comprising:

3   means for downloading the file from the storage location address.

1   25.   The system of claim 23, wherein the first request is for checking-in the

2   file, and further comprising:

3   means for sending a new version of the file to the storage location address.

1   26.   The system of claim 23, further comprising:

2   means for receiving a first response code from a remote computer in response

3   to the first request; and

4   means for receiving a second response code from the storage location in

5   response to the second request.

1   27.   An article of manufacture including code for controlling and

2   providing access to a file at storage locations on a network to at least one remote

3   computer over the network, wherein the code is capable of causing operations

4   comprising:

5   maintaining metadata about files maintained at remote storage

6   locations;

7   receiving a request from the remote computer for a filename of a

8   requested file over the network;

9   determining from the metadata one remote storage location address

10 associated with the filename where the requested file is located;

11   updating the metadata for the requested file; and

12   sending the storage location address to the remote computer.

1   28.   The article of manufacture of claim 27, wherein the remote computer

2   is a source code management system client.

1   29.   The article of manufacture of claim 27, wherein the storage location

2   address identifies a storage device that is at a geographical location closer to the

3   remote computer than a location of the metadata.

1   30.   The article of manufacture of claim 29, wherein the request is for

2   checking-out the requested file corresponding to the filename, and further comprising:

3   locking the requested file;

4   returning a response code to the remote computer indicating that file check-out

5   is successful; and

6   updating the metadata indicating that the requested file is checked-out and

7   locked.

1   31.   The article of manufacture of claim 29, wherein the request is for

2   checking-in the requested file corresponding to the filename, and further comprising:

3   updating the metadata indicating the requested file is unlocked; and

4   returning a response code indicating that the file check-in is successful.

1   32.   The article of manufacture of claim 27, further comprising:

2   processing a pattern of requests for the file received from remote computers at

3   different geographical locations;

4   determining one of a plurality of remote storage locations based on the pattern

5   of requests for the file;

6   storing the file corresponding to the file at the determined remote storage

7   location; and

8   saving a correspondence between the file and the storage location address in

9   the metadata.

1   33.   The article of manufacture of claim 32, wherein the determined remote

2   storage location is at a geographical location that is more proximate to the remote

3   computer having more requests for the file than other remote computers.

1   34.   The article of manufacture of claim 32, wherein the determined remote

2   storage location is selected from the plurality of remote storage locations to minimize

3   a distance the requested file is transmitted between each remote computer and the

4 remote storage location based on the number of requests for the file from each remote

5 computer.

1   35.   The article of manufacture of claim 27, wherein the remote computer

2 is a source code management system client, and the request is one of check-in, check-

3 out, extract, lock, unlock, delete.

1   36.   A article of manufacture including code for accessing a file in a source

2 code management system, wherein the code is capable of causing operations

3 comprising:

4   sending a first request for a file;

5   receiving a storage location address containing the file in response to the first

6 request;

7   sending a second request to the storage location address; and

8   receiving an access to the file from the storage location address.

1   37.   The article of manufacture of claim 36, wherein the first request is for

2 checking-out the file, and further comprising:

3   downloading the file from the storage location address.

1   38.   The article of manufacture of claim 36, wherein the first request is for

2 checking-in the file, and further comprising:

3   sending a new version of the file to the storage location address.

1   39.   The article of manufacture of claim 36, further comprising:

2   receiving a first response code from a remote computer in response to the first

3 request; and

4   receiving a second response code from the storage location in response to the

5 second request.